UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,970	12/09/2003	Allen K. Hawley	SVL920030037US1	6431

24852 7590 02/08/2007		EXAMINER	
INTERNATIONAL BUSINESS MACHINES CORP		WEI, ZHENG	
IP LAW			
555 BAILEY AVENUE , J46/G4		ART UNIT	PAPER NUMBER
SAN JOSE, CA 95141		2192	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/731,970	HAWLEY ET AL.
	Examiner	Art Unit	
	Zheng Wei	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 December 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>09 December 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-SB/08)
    Paper No(s)/Mail Date <u>12/09/2003. 01/05/2007</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This office action is in response to the application filed on 12/09/2003.

2.   Claims 1-18 are pending and have been examined.

Oath/Declaration

3.   The Office acknowledges receipt of a properly signed oath/declaration filed on

December 09, 2003.

Priority

4.   The priority date considered for this application is December 09, 2003.

Information Disclosure Statement

5.   The information disclosure statements filed 12/09/2004 and 01/05/2007 have

been placed in the application file. However the information referred to IDS filed

on 12/09/2003 has not been considered. Because the Applicant does not provide

a copy of referred document.

Drawings

6.   The drawings filed on December 09, 2003 are accepted by the Examiner.

Specification

7.   The disclosure is objected to because of the following informalities:

The information of Section "CROSS-REFERENCE TO RELATED

APPLICATIONS" needs to be updated by using assigned Application Serial

Number.

Appropriate correction is required.

Claim Objections

8.   Claims 4, 10 and 16 are objected to because of the following informalities:

Claims 4, 10 and 16: "proposing an identified variable as a proposal responsive

to a verb of the partial program instruction statement **and** responsive to a

variable type of the variable" should be change to -- proposing an identified

variable as a proposal responsive to a verb of the partial program instruction

statement **or** responsive to a variable type of the variable—according to the

specification (see p.6, lines 14-16, "Candidates may be proposed responsive to a

verb of the partial program instruction statement, responsive to a variable type of

variable, or responsive to a portion of the program containing the partial program

instruction statement"). For the purpose of compact prosecution, the Examiner

treats the claims as "or" conditions.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

9.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10.   Claims 13-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 13-18: Claims 13-18 claim a computer system, which comprises parsers that seem to be software components (see Fig.9, element 908). Therefore the computer system can be interpreted as only consisting of software programs. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized. Thus, they are not statutory.

This rejection can be overcome by adding computer hardware components into the claims that permit the computer program's functionality to be realized.

See M.P.E.P. 2106.01 (I)

Claim Rejections - 35 USC § 102

11.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12.   Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by

Shulman (Shulman et al., US 6,026,233)

Claim 1:

Shulman discloses an article of manufacture for use in a computer system for

providing assistance to a programmer writing computer programming code, said

assistance comprising suggested candidates responsive to a parsing of a partial

program instruction statement, said article of manufacture comprising a

computer-useable storage medium having a computer program embodied in said

medium which causes the computer system to execute method steps comprising:

- parsing a program containing the partial program instruction statement to

   identify variables contained in the program (see for example, Fig.13A, steps

   1331, 1331, "Parse Program Statement Into Tokens" and related text);

- parsing the partial program instruction statement to generate proposals (see

   for example (see for example, Fig.3, element 210 (partial program statement),

   element 220 (proposal information) and related text); and

- providing proposals to append to the partial program instruction statement to

   a user responsive to both the parsing of the program and the parsing of the

partial program instruction statement (see for example, Fig.5, elements 510

and 210 and related text, selected proposal (font) has been appended to

partial program (mytext));

Claim 2:

Shulman further discloses the article of manufacture of claim 1 wherein the

method further comprises: proposing an identified variable as a proposal

responsive to a verb of the partial program instruction statement (see for

example, Fig.13B, step 1355, "Determine Object Type and Member Return

Type", step 1357 "Generate Assist Window with Member List" and related text).

Claim 3:

Shulman also discloses the article of manufacture of claim 1 wherein the method

further comprises: proposing an identified variable as a proposal responsive to a

variable type of the variable (see for example, col.4, lines46-48, "assist window

includes any finite list of previously declared entities and/or entity type", also see

Fig.13B, step 1355, "Determine Object Type and Member Return Type")

Claim 4:

Shulman also disclose the article of manufacture of claim 1 wherein the method

further comprises: proposing an identified variable as a proposal responsive to a

verb of the partial program instruction statement (see for example, Fig.13B, step

1355, "Determine Object Type and Member Return Type", step 1357 "Generate

Assist Window with Member List" and related text) **or** responsive to a variable

type of the variable (see for example, col.4, lines46-48, "assist window includes

any finite list of previously declared entities and/or entity type", also see Fig.13B,

step 1355, "Determine Object Type and Member Return Type").

Claim 5:

Shulman further discloses the article of manufacture of claim 1 wherein the

method further comprises: proposing an identified variable as a proposal

responsive to a portion of the program containing the partial program instruction

statement (see for example, Fig.7, element 740 and related text for proposing an

previous declared variable for the procedure "MyProc")

Claim 6:

Shulman also discloses the article of manufacture of claim 1 wherein the parsing

of the program and the parsing of the partial program instruction statement are

performed according to a user-selected programming language dependent file

selected from a plurality of programming language dependent files (see for

example, col.5, lines 44-46, "local program definition", "global library definition",

also see, col.7, lines 6-9, "the present invention can be implemented within any

programming language")

Claims 7-12:

Claims 7-12 are the exactly the same methods that are used by claimed article of

manufacture for providing assistance to a programmer writing computer

programming code as addressed in claims 1-6 above respectively. Therefore, as

all claimed limitations have been address and/or set forth and the references

teach all the limitations of claims 1-6, they also anticipate the claims 7-12 (see for

example, col.19, line29 –col.20, line 26).

Claim Rejections - 35 USC § 103

13.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14.   Claims 13-18 rejected under 35 U.S.C. 103(a) as being unpatentable over

Shulman (Shulman et al., US 6,026,233)

Claims 13-18:

Claims 13-18 are computer system version of the claimed article of manufacture,

wherein all claimed limitation for providing a code assist function have been

addressed and/or set forth in claims 1-6 above respectively. Therefore they also

would have been obvious in view of Shulman's teachings. (see for example,

Fig.1 computer system and related text, and also see col.5, lines 56-67,

description of hardware system for generating statement).

Conclusion

15.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure:

- Vaidyanathan et al. (US 6,305,008) discloses a system for automatic

  statement completion.

- Vaidyanathan et al. (US 6,502.233) discloses an automated help system for

  reference information.

- Zatloukal et al. (2005/0015747) discloses a system and method for

  performing code completion in an integrated development environment.

16.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Zheng Wei whose telephone number is (571)

270-1059. The examiner can normally be reached on Monday-Thursday 8:00-
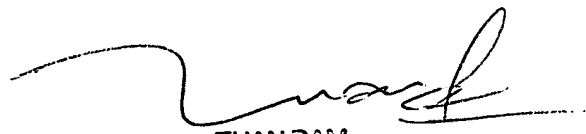
15:00.

        If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The

fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571- 272-1000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ZW

TUAN DAM
SUPERVISORY PATENT EXAMINER